

```

chain nodes :
  7  8  9  10  11  20
ring nodes :
  1  2  3  4  5  6  12  13  14  15  16  17  23  24  25  26  27  28  29  30  31  32  33  34  35
  36  37  38  39  40  41  42  43  44  45  46  47  48  49  50  51  52
chain bonds :
  3-7  7-8  8-9  9-10  10-11  10-17
ring bonds :
  1-2  1-6  2-3  3-4  4-5  5-6  12-13  12-17  13-14  14-15  15-16  16-17  23-24  23-28  24-25
  25-26  26-27  27-28  29-30  29-34  30-31  31-32  32-33  33-34  35-36  35-40  36-37  37-38
  38-39  39-40  41-42  41-46  42-43  43-44  44-45  45-46  47-48  47-52  48-49  49-50  50-51
  51-52
exact/norm bonds :
  3-7  7-8  8-9  9-10  10-11
exact bonds :
  10-17
normalized bonds :
  1-2  1-6  2-3  3-4  4-5  5-6  12-13  12-17  13-14  14-15  15-16  16-17  23-24  23-28  24-25
  25-26  26-27  27-28  29-30  29-34  30-31  31-32  32-33  33-34  35-36  35-40  36-37  37-38
  38-39  39-40  41-42  41-46  42-43  43-44  44-45  45-46  47-48  47-52  48-49  49-50  50-51
  51-52
isolated ring systems :
  containing 1 : 12 : 23 : 29 : 35 : 41 : 47 :
```

G1: [\*1-\*2], [\*3-\*4], [\*5-\*6], [\*7-\*8], [\*9-\*10]

```

Match level :
  1:Atom  2:Atom  3:Atom  4:Atom  5:Atom  6:Atom  7:CLASS  8:Atom  9:CLASS 10:CLASS 11:CLASS
 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 20:Atom 21:Atom 23:Atom 24:Atom
 25:Atom 26:Atom 27:Atom 28:Atom 29:Atom 30:Atom 31:Atom 32:Atom 33:Atom 34:Atom
 35:Atom 36:Atom 37:Atom 38:Atom 39:Atom 40:Atom 41:Atom 42:Atom 43:Atom 44:Atom
 45:Atom 46:Atom 47:Atom 48:Atom 49:Atom 50:Atom 51:Atom 52:Atom
```

Generic attributes :  
20:

Number of Carbon Atoms : less than 7  
Type of Ring System : Monocyclic

Element Count :

Node 8: Limited

C,C5

N,N1

O,O0

S,S0

Node 20: Limited

C,C4-5

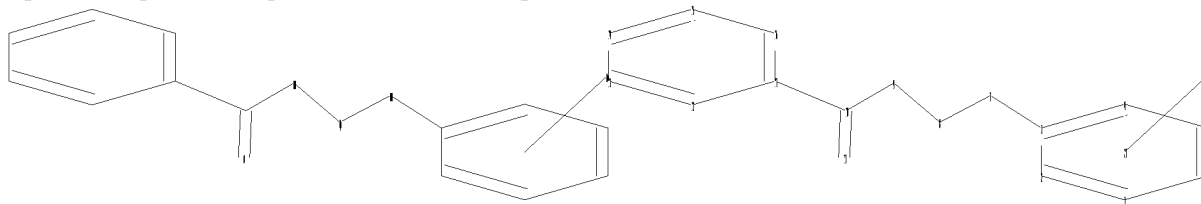
N,N1-2

O,O0

S,S0

=&gt;

Uploading C:\Program Files\Stnexp\Queries\10522944.str



chain nodes :

7 8 9 10 11 20

ring nodes :

1 2 3 4 5 6 12 13 14 15 16 17

chain bonds :

3-7 7-8 8-9 9-10 10-11 10-17

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 12-13 12-17 13-14 14-15 15-16 16-17

exact/norm bonds :

3-7 7-8 8-9 9-10 10-11

exact bonds :

10-17

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6 12-13 12-17 13-14 14-15 15-16 16-17

isolated ring systems :

containing 1 : 12 :

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:Atom 9:CLASS 10:CLASS

11:CLASS 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 20:Atom 21:Atom

Generic attributes :

8:

Saturation : Unsaturated

Number of Carbon Atoms : less than 7

Number of Hetero Atoms : Exactly 1

Type of Ring System : Monocyclic

20:

Number of Carbon Atoms : less than 7

Type of Ring System : Monocyclic

Element Count :

Node 8: Limited

C,C5

N,N1

O,O0

S,S0

Node 20: Limited

C,C4-5

N,N1-2

10/522,944

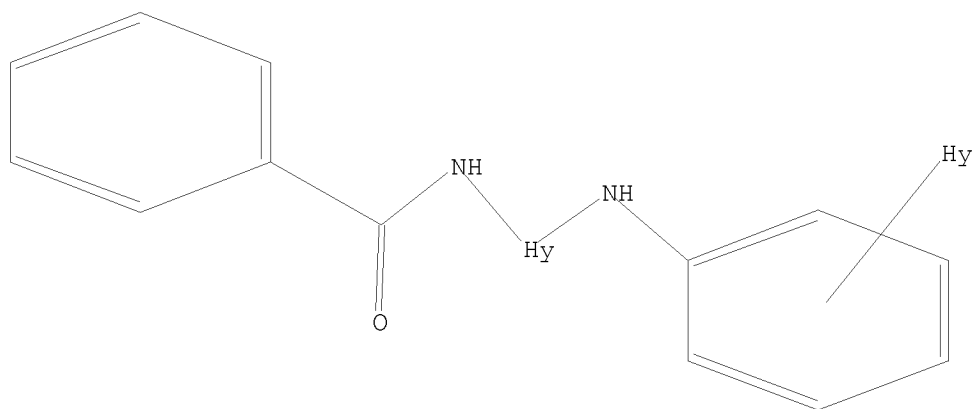
O,00  
S,S0

L1        STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

L1        STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1 sss sam

SAMPLE SEARCH INITIATED 18:21:46 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED -     99490 TO ITERATE

2.0% PROCESSED        2000 ITERATIONS  
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)  
SEARCH TIME: 00.00.01

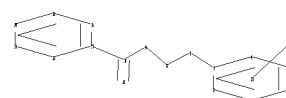
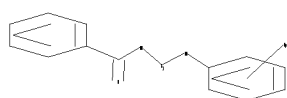
0 ANSWERS

FULL FILE PROJECTIONS:    ONLINE    \*\*INCOMPLETE\*\*  
                              BATCH    \*\*INCOMPLETE\*\*  
PROJECTED ITERATIONS:        1971074 TO    2008526  
PROJECTED ANSWERS:                0 TO        0

L2                0 SEA SSS SAM L1

=>

Uploading C:\Program Files\Stnexp\Queries\10522944 (a).str



chain nodes :  
7 8 9 10 11 20

```

ring nodes :
1  2  3  4  5  6 12 13 14 15 16 17 23 24 25 26 27 28 29 30 31 32
33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52
chain bonds :
3-7  7-8  8-9  9-10 10-11 10-17
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 12-13 12-17 13-14 14-15 15-16 16-17 23-24
23-28 24-25 25-26 26-27 27-28 29-30 29-34 30-31 31-32 32-33 33-34 35-36
35-40 36-37 37-38 38-39 39-40 41-42 41-46 42-43 43-44 44-45 45-46 47-48
47-52 48-49 49-50 50-51 51-52
exact/norm bonds :
3-7  7-8  8-9  9-10 10-11
exact bonds :
10-17
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6 12-13 12-17 13-14 14-15 15-16 16-17 23-24
23-28 24-25 25-26 26-27 27-28 29-30 29-34 30-31 31-32 32-33 33-34 35-36
35-40 36-37 37-38 38-39 39-40 41-42 41-46 42-43 43-44 44-45 45-46 47-48
47-52 48-49 49-50 50-51 51-52
isolated ring systems :
containing 1 : 12 : 23 : 29 : 35 : 41 : 47 :

```

```
G1:[*1-*2],[*3-*4],[*5-*6],[*7-*8],[*9-*10]
```

```

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:Atom 9:CLASS 10:CLASS
11:CLASS 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 20:Atom 21:Atom
23:Atom 24:Atom 25:Atom 26:Atom 27:Atom 28:Atom 29:Atom 30:Atom 31:Atom
32:Atom 33:Atom 34:Atom 35:Atom 36:Atom 37:Atom 38:Atom 39:Atom 40:Atom
41:Atom 42:Atom 43:Atom 44:Atom 45:Atom 46:Atom 47:Atom 48:Atom 49:Atom
50:Atom 51:Atom 52:Atom
Generic attributes :
20:
Number of Carbon Atoms : less than 7
Type of Ring System    : Monocyclic

```

```
Element Count :
```

```
Node 8: Limited
```

```
  C,C5
```

```
  N,N1
```

```
  O,O0
```

```
  S,S0
```

```
Node 20: Limited
```

```
  C,C4-5
```

```
  N,N1-2
```

```
  O,O0
```

```
  S,S0
```

```
L3          STRUCTURE UPLOADED
```

```
=> d 13
L3 HAS NO ANSWERS
L3          STR
```

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

Structure attributes must be viewed using STN Express query preparation.

```
=> s 13 sss sam
SAMPLE SEARCH INITIATED 18:27:39 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -      115 TO ITERATE
```

```
100.0% PROCESSED      115 ITERATIONS      0 ANSWERS
SEARCH TIME: 00.00.01
```

```
FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:   1657 TO      2943
PROJECTED ANSWERS:      0 TO        0
```

```
L4          0 SEA SSS SAM L3
```

```
=> s 13 sss ful
FULL SEARCH INITIATED 18:29:10 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -      2096 TO ITERATE
```

```
100.0% PROCESSED      2096 ITERATIONS      5 ANSWERS
SEARCH TIME: 00.00.01
```


```
L5          5 SEA SSS FUL L3
```

```
=> => s 15
L6          1 L5
```

```
=> d 16 bib,ab,hitstr
```

L6 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2004:101157 CAPLUS  
 DN 140:163885  
 TI Preparation of pyrimidinylphenylaminopyridylbenzamides as protein tyrosine kinase inhibitors  
 IN Danter, Wayne R.; Brown, Martyn; Ma, George; Rusu, Ghenadie; Zhong, Jianhua; Lazarowych, Natalie; Houldsworth, Stephen  
 PA Can.  
 SO PCT Int. Appl., 42 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

Applicant's

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004011456	A1	20040205	WO 2003-CA1162	20030731
	WO 2004011456	A8	20040805		
	WO 2004011456	A9	20050602		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	CA 2494061	A1	20040205	CA 2003-2494061	20030731
	AU 2003250701	A1	20040216	AU 2003-250701	20030731
	EP 1542989	A1	20050622	EP 2003-771039	20030731
	EP 1542989	B1	20070418		
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK			
	AT 360015	T	20070515	AT 2003-771039	20030731
	US 20060069105	A1	20060330	US 2005- 	20050728
PRAI	US 2002-399408P	P	20020731		
	WO 2003-CA1162	W	20030731		

OS MARPAT 140:163885

AB Title compds. [I; n = integer; R1, R2 = (substituted) piperidinyl, dihydropyrimidinyl, tetrahydropyrimidinyl], were prepared Thus, amine (II) (preparation given), chloropyridine (III) (preparation given), Pd(OAc)<sub>2</sub>, and

BINAP

were heated together for 20 h to give 6.5% protected coupling product which was treated with HCl in MeOH to give 70% title compound (IV). IV showed -Log(GI<sub>50</sub>) = -5.7 against K562(CML) leukemia cells expressing abnormal protein tyrosine kinase in an in silico assay.

IT 653593-64-7P 653593-65-8P 653593-66-9P

653593-67-0P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

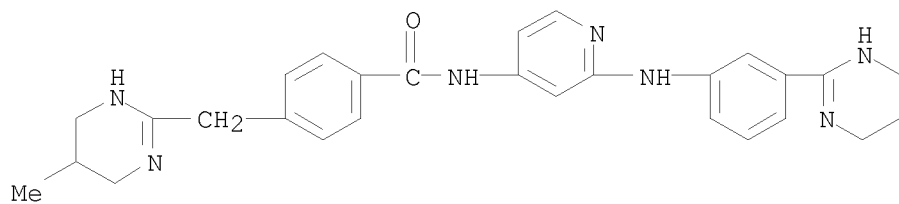
(preparation of pyrimidinylphenylaminopyridylbenzamides as protein tyrosine kinase inhibitors)

RN 653593-64-7 CAPLUS

CN Benzamide, 4-[(1,4,5,6-tetrahydro-5-methyl-2-pyrimidinyl)methyl]-N-[2-[[3-(1,4,5,6-tetrahydro-2-pyrimidinyl)phenyl]amino]-4-pyridinyl]- (CA INDEX

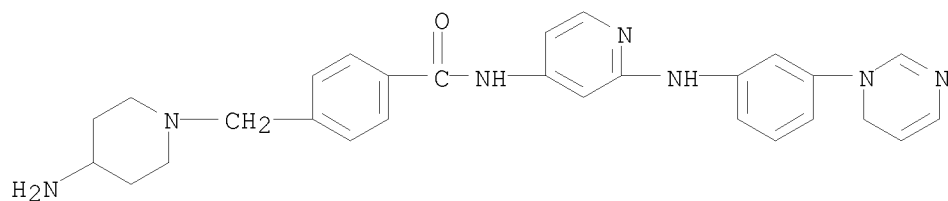


NAME)



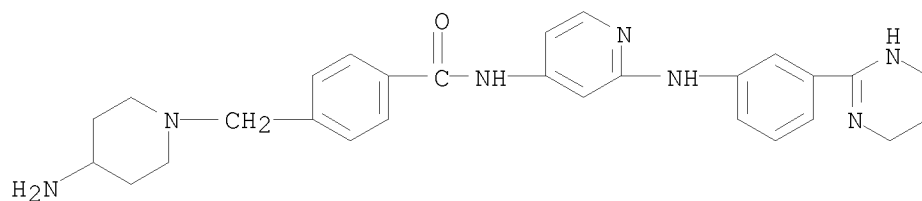
RN 653593-65-8 CAPLUS

CN Benzamide, 4-[(4-amino-1-piperidinyl)methyl]-N-[2-[[3-(1(6H)-pyrimidinyl)phenyl]amino]-4-pyridinyl]- (CA INDEX NAME)



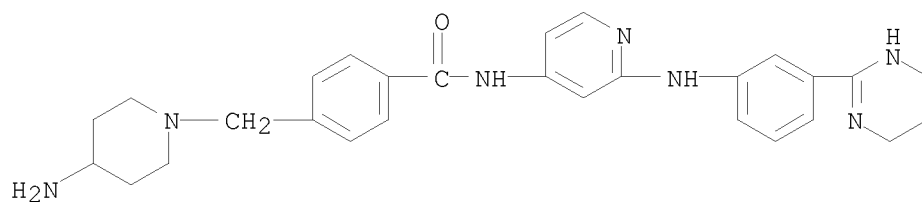
RN 653593-66-9 CAPLUS

CN Benzamide, 4-[(4-amino-1-piperidinyl)methyl]-N-[2-[[3-(1,4,5,6-tetrahydro-2-pyrimidinyl)phenyl]amino]-4-pyridinyl]- (CA INDEX NAME)



RN 653593-67-0 CAPLUS

CN Benzamide, 4-[(4-amino-1-piperidinyl)methyl]-N-[2-[[3-(1,4,5,6-tetrahydro-2-pyrimidinyl)phenyl]amino]-4-pyridinyl]-, tetrahydrochloride (9CI) (CA INDEX NAME)



● 4 HCl

IT 653593-68-1P

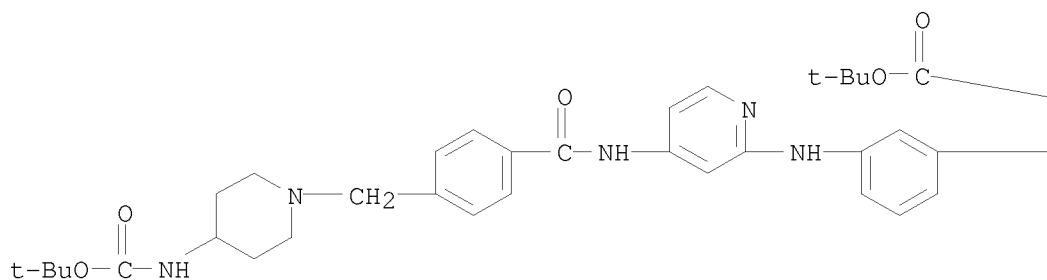
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of pyrimidinylphenylaminopyridylbenzamides as protein tyrosine kinase inhibitors)

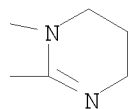
RN 653593-68-1 CAPLUS

CN 1(4H)-Pyrimidinecarboxylic acid, 2-[3-[[4-[[4-[[4-[[[(1,1-dimethylethoxy)carbonyl]amino]-1-piperidinyl]methyl]benzoyl]amino]-2-pyridinyl]amino]phenyl]-5,6-dihydro-, 1,1-dimethylethyl ester (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



RE.CNT 2

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/522,944

=> log y

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

5.93

190.23

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

-0.80

-0.80

STN INTERNATIONAL LOGOFF AT 18:29:41 ON 17 APR 2008